

What is claimed is:

1. A base station apparatus comprising a determination section that determines adaptive modulation parameters used to transmit a transmission packet directed to a mobile station based on channel quality between the own station and said mobile station and QoS of said transmission packet.

2. A base station apparatus comprising:

a determination section that determines adaptive modulation parameters used to transmit a transmission packet directed to a mobile station based on channel quality between the own station and said mobile station;

and

a change section that changes the adaptive modulation parameters determined by said determination section based on QoS of said transmission packet.

3. A base station apparatus that determines adaptive modulation parameters used to transmit a transmission packet directed to a mobile station based on channel quality between the own station and said mobile station, comprising:

a change section that changes a correspondence between said channel quality and adaptive modulation parameters determined based on said channel quality, based on QoS of said transmission packet; and

a determination section that determines adaptive modulation parameters used to transmit said transmission packet using said changed correspondence.

- 5 4. A base station apparatus that determines adaptive modulation parameters of a transmission packet directed to a mobile station based on a CQI transmitted from said mobile station, comprising:

a correction section that corrects the CQI  
10 transmitted from said mobile station based on QoS of said transmission packet; and

a determination section that determines adaptive modulation parameters of said transmission packet based on the corrected CQI.

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5. The base station apparatus according to claim 1, wherein said determination section determines said adaptive modulation parameters further based on an achievement ratio of QoS of said transmission packet transmitted in  
20 the past.

6. The base station apparatus according to claim 3, wherein said determination section determines said adaptive modulation parameters further based on an achievement  
25 ratio of QoS of said transmission packet transmitted in the past.

7. The base station apparatus according to claim 1, wherein

said determination section determines said adaptive modulation parameters further based on a remaining time with respect to a transmission allowable delay time of said transmission packet.

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8. The base station apparatus according to claim 3, wherein said determination section determines said adaptive modulation parameters further based on a remaining time with respect to a transmission allowable delay time of said transmission packet.

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9. The base station apparatus according to claim 1, further comprising a scheduler that schedules transmission times based on a remaining time with respect to a transmission allowable delay time of said transmission packet.

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10. The base station apparatus according to claim 3, further comprising a scheduler that schedules transmission times based on a remaining time with respect to a transmission allowable delay time of said transmission packet.

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11. A mobile station apparatus comprising:

a determination section that determines adaptive modulation parameters used when a base station transmits a transmission packet based on channel quality between said base station and the own station and QoS of said transmission packet transmitted from said base station

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to the own station; and

a notification section that notifies said base station of the determined adaptive modulation parameters.

5 12. A mobile station apparatus that determines adaptive modulation parameters used by a base station for a transmission packet directed to the own station based on channel quality between said base station and the own station and notifies said base station of said adaptive modulation parameters, comprising:

a change section that changes a correspondence between said channel quality and adaptive modulation parameters determined based on said channel quality, based on QoS of said transmission packet; and

15 a determination section that determines adaptive modulation parameters used for said transmission packet using said changed correspondence.

13. An adaptive modulation method for determining adaptive modulation parameters used by a base station for a transmission packet directed to a mobile station based on channel quality between said base station and mobile station, comprising:

25 a change step of changing a correspondence between said channel quality and adaptive modulation parameters determined based on said channel quality, based on QoS of said transmission packet; and

a determination step of determining adaptive

modulation parameters used to transmit said transmission packet using said changed correspondence.